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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,779	01/23/2002	Atsushi Kawasumi	005405.00004	7218

22907 7590 09/13/2002

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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT PAPER NUMBER

2816

DATE MAILED: 09/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,779

Applicant(s)

KAWASUMI, ATSUSHI

Examiner

Terry D. Cunningham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,9-15,17,19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,9-11,17,19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/449,382.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because, as understood, the drain of 122 of Fig. 6 should be shown as an output rather than ground. Appropriate correction is required. Note, Applicant may no longer request that any objection to the drawing(s) be held in abeyance. See 37 C.F.R. § 1.85(a).

Double Patenting

Applicant is advised that should claim 1 be found allowable, claim 22 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 9-11, 17, 19, 21 and 2 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. In claim 19, a claimed means or element corresponding to the input transistor (e.g., the remaining one of 111 and 112 of Fig. 7) is deemed critical or essential to the practice of the invention, but is not included in the claim(s). In claim 21, current source 115 and a claimed means or element corresponding to input transistors (e.g., the remaining two of 121, 122, 125 and 126 of Fig. 14) are deemed critical or essential to the

practice of the invention, but are not included in the claim(s). An arrangement lacking these features is not enabled by the disclosure since it cannot be understood from the specification how the circuit will operate without such. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

It is noted that the above change to claim 19 is deemed necessary because such now reads on Fig. 14, instead of Fig. 6.

Applicant remarks that "Claims 19-21" relate to power source circuit, like those illustrated, for example, in Figs. 16 and 18, respectively. Applicant respectfully submits that it is not necessary to recite a current source...or an input transistor". However, this statement is not at all understood. A reading of the specification makes it quite clear that the circuit in Figs. 16 and 18 directly correspond to the circuits shown in Figs. 7 (or 8) and 14, respectively. The circuit of Fig. 16 does in fact include virtually every element in Fig. 7 except for elements 113_1 - $113_{(n-1)}$. As seen, transistors 216_0 - 216_3 in Figs. 16 are used in place of elements 113_1 - $113_{(n-1)}$ of Fig. 7. Additionally, the circuit of Fig. 18 does in fact include virtually every element in Fig. 14 except that it has additional transistors. Thus, it is clear from the specification that the circuit of Figs. 16 and 18 necessarily include (although not shown) the "current source" and the "input transistors".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 9-11, 17, 19, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 2, line 6, there is no support found in the specification for the “second power source”. As understood from the specification, Vd1 of Fig. 4 is the output of the circuit, such is not a separate source voltage.

Claim 9 is rejected for similar reasons as claim 2.

Claims 10 and 11 are rejected for the reasons discussed above with claim 9.

In claim 17, there is no connection recited between the “current source” and the rest of the circuit. Also, there are insufficient connections recited for the transistors in the “first” and “second”. Since the only connection recited for the gates of one “group” are that they are in common with the gates of the other “group”, it is not seen that such can operate.

In claim 19, there are insufficient connections recited for the transistors in the “first” and “second”, similarly as discussed with claim 17..

Claim 21 is rejected for similar reasons as claim 17.

In claim 22, there is no connection recited between the “current source” and the rest of the circuit.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 19 and 22, are rejected under 35 U.S.C. §102(b) as being anticipated by Guliani (USPN 5,109,187). Guliani discloses, in Fig. 2, a circuit comprising: “a first PMOS transistor (42)”; “a second PMOS transistor (32 or 44)”; and “a compensation circuit (remainder of

circuit)” having “at least one compensation PMOS transistor (16)”, all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Since the circuit to Guliani uses negative feedback, such must inherently have the recited operation (as recited e.g., in lines 11-12 of claim 2).

Allowable Subject Matter

Claims 9-11, 17 and 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

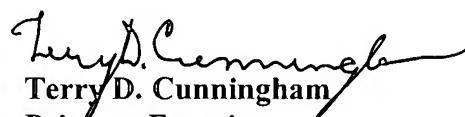
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC
September 9, 2002


Terry D. Cunningham
Primary Examiner
Art Unit 2816